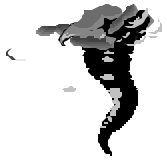

Severe Weather Awareness Week
March 10-16, 2002

Flood Facts

- Four types of flooding occur in North Carolina:

  General river flooding occurs after heavy rain has fallen over an extended period of time. It usually occurs slowly enough to allow people and property to be moved to safety.

  Urban and small stream flooding occurs when heavy rain falls in a short period of time. Storm sewers and small streams cannot handle the runoff resulting in flooded underpasses, basements and back-up sewers.

  Flash flooding occurs very quickly and is always life threatening. It happens more frequently in hilly or mountainous areas. Rainfall of two to four inches in a couple of hours can cause a flash flood. Dam failures also can result in flash flooding.

  Coastal flooding and erosion is generally caused by hurricanes or severe winter storms (nor'easters). Persistent high winds and air pressure changes push water toward the shore, causing a "storm surge", that can raise the level of the ocean by several feet. Waves can be very destructive as they batter beach structures and undermine them by eroding sand.

- Floods and flash floods can occur away from the area of heavy rain. Especially in hilly or mountainous areas, rainfall that occurs upstream can result in flash floods downhill or downstream from where the heavier rain fell. This happened in early January 1998, when up to 15 inches of rain fell on higher terrain in the mountains and caused major flash flooding in lower elevations. People in Avery, Mitchell, and Yancey counties reported a "wall of water" that ripped through several communities.

- Flash floods are common in the warm season due to thunderstorms dropping large amounts of rain in short periods of time. Although hilly and mountainous terrain is especially prone to flash floods, even relatively flat areas can experience them. Flash floods created by poor drainage and deep ponding of water on the roads occurred in some areas of eastern North Carolina when Hurricane Floyd dumped 18 to 20 inches of rain in a matter of hours.

- General river and urban flooding was widespread over eastern North Carolina during late summer and early fall 1999. Hurricanes Dennis, Floyd, and Irene dumped as much as 32 inches of rain on already water-logged fields and forests. The resulting floods covered more than 6,600 square miles.

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